## AMENDMENT TO THE CLAIMS

*The following claim listing replaces all prior listings and versions of the claims:*

## LISTING OF CLAIMS

1. (Currently Amended) A print quality measuring method for comparing an image of reference paper and a printed image of a print corresponding to the image of the reference paper for controlling ink feeding rates of a printing machine, the method comprising:

a reading step for reading, by using an image pickup device, the image of the reference paper and the printed image of the print;

a representative color determining step for determining, from image data to be printed, a representative color characterizing the printed image of the print, and positions of the representative color; and

a calculating step for carrying out, by using a calculating device including a CPU, a comparative calculation of color data in the positions of the representative color of the image of the reference paper and color data in the positions of the representative color of the printed image of the print, to create control data for controlling the ink feeding rates of the printing machine,

wherein the representative color and the positions thereof are determined for respective rectangular sections on a printing paper corresponding to ink keys in each ink well of the printing machine,

wherein said image data has three color components, said representative color determining step being executed to classify pixels in each of said sections corresponding to ink keys according to tones of each of the three color components, and determine said representative color and a position thereof from pixels included in a predetermined class interval,

wherein said representative color determining step is executed to create a histogram with

the tones of each of the three color components of each pixel in each of said sections, and select the representative color and the position thereof from pixels included in a class interval of maximum frequency in said histogram, and

wherein the position of the representative color selected is a position having a maximum area formed by the pixels included in said class interval.

2-5. (Cancelled)

6. (Currently Amended) The print quality measuring method as defined in claim 1, wherein said image data for determining the representative color is one of platemaking data used at platemaking time [[,]] and image data obtained by processing the platemaking data ~~, and image data obtained by reading the reference paper~~.

7. (Previously presented) The print quality measuring method of claim 1, further comprising:

a gray control color determining step for determining, from the image data, a gray control color expressed in a substantially achromatic color and positions of the gray control color,

wherein said calculating step is executed to create the control data for controlling the ink feeding rates of the printing machine, by using results of a comparative calculation of color data in the positions of said gray control color of the image of the reference paper and color data in the positions of said gray control color of the printed image of the print, as well as results of the comparative calculation of the color data in the positions of the representative color of the image of the reference paper and the color data in the positions of the representative color of the printed

image of the print,

wherein only the results of the comparative calculation of the color data in the positions of said gray control color of the image of the reference paper and the color data in the positions of said gray control color of the printed image of the print are used when the representative color is devoid of one of said three color components.

8. (Cancelled)

9. (Previously Presented) The print quality measuring method as defined in claim 7, wherein the control data for controlling the ink feeding rates of the printing machine is created by selectively using the results of the comparative calculation of the color data in the positions of the representative color of the image of the reference paper and the color data in the positions of the representative color of the printed image of the print, and the results of the comparative calculation of the color data in the positions of said gray control color of the image of the reference paper and the color data in the positions of said gray control color of the printed image of the print, or by using a compromise in an appropriate ratio of the results of the two comparative calculations.

10. (Currently Amended) A print quality measuring method for comparing an image obtained by reading an image of a print printed by using one of platemaking data and image data created from the platemaking data with said platemaking data or said image data, to create control data for controlling ink feeding rates of a printing machine, said method comprising:

a reading step for reading, by using an image pickup device, the image of the print;

a representative color determining step for determining a representative color characterizing the image of the print, and positions of the representative color, based on one of said platemaking data used at platemaking time and said image data created from the platemaking data; and

a calculating step for carrying out, by using a calculating device including a CPU, a comparative calculation of color data in the positions of the representative color of the image of the print and the representative color, to create the control data for controlling the ink feeding rates of the printing machine,

wherein the representative color and the positions thereof are determined for respective rectangular sections on a printing paper corresponding to ink keys in each ink well of the printing machine,

wherein each of said platemaking data used at platemaking time and said image data created from the platemaking data has three color components, said representative color determining step being executed to classify pixels in each of said sections corresponding to ink keys, and determine the representative color and a position thereof from pixels included in a predetermined class interval,

wherein said representative color determining step is executed to create a histogram with tones of each of the three color components of each pixel in each of said sections, and select the representative color and the position thereof from pixels included in a class interval of maximum frequency in said histogram, and

wherein the position of the representative color selected is a position having a maximum area formed by the pixels included in said class interval.

11-14. (Cancelled)

15. (Previously presented) The print quality measuring method of claim 10, further comprising:

a gray control color determining step for determining a gray control color expressed in a substantially achromatic color and positions of the gray control color, based on one of said platemaking data used at platemaking time and said image data created from the platemaking data,

wherein said calculating step is executed to create the control data for controlling the ink feeding rates of the printing machine, by using results of a comparative calculation of color data in the positions of said gray control color of image data obtained by reading the image of the print and said gray control color, as well as results of the comparative calculation of the color data in the positions of the representative color of the image of the print and the representative color, and

wherein only the results of the comparative calculation of the color data in the positions of said gray control color of the image data obtained by reading the image of the print and said gray control color are used when the representative color is devoid of one of said three color components.

16. (Cancelled)

17. (Previously Presented) The print quality measuring method as defined in claim 15, wherein the control data for controlling the ink feeding rates of the printing machine is created by

selectively using the results of the comparative calculation of the color data in the positions of the representative color of the image data obtained by reading the image of the print and the representative color, and the results of the comparative calculation of the color data in the positions of said gray control color of the image data obtained by reading the image of the print and said gray control color, or by using a compromise in an appropriate ratio of the results of the two comparative calculations.

18. (Currently Amended) A print quality measuring apparatus for comparing an image of reference paper and a printed image of a print corresponding to the image of the reference paper for controlling ink feeding rates of a printing machine, said apparatus comprising:

reading means for reading the image of the reference paper and the printed image of the print;

representative color determining means for determining, from image data to be printed, a representative color characterizing the printed image of the print, and positions of the representative color; and

calculating means for carrying out a comparative calculation of color data in the positions of the representative color of the image of the reference paper and color data in the positions of the representative color of the printed image of the print, to create control data for controlling the ink feeding rates of the printing machine,

wherein the representative color and the positions thereof are determined for respective rectangular sections on a printing paper corresponding to ink keys in each ink well of the printing machine,

wherein said image data has three color components, said representative color

determining means being arranged to classify pixels in each of said sections corresponding to ink keys, and determine the representative color and a position thereof from pixels included in a predetermined class interval,

wherein said representative color determining means is arranged to create a histogram with tones of each of the three color components of each pixel in each of said sections, and select the representative color and the position thereof from pixels included in a class interval of maximum frequency in said histogram, and

wherein the position of the representative color selected is a position having a maximum area formed by the pixels included in said class interval.

19-22. (Cancelled)

23. (Currently Amended) The print quality measuring apparatus as defined in claim 18, wherein said image data to be printed for determining the representative color is one of platemaking data used at platemaking time [[,]] and image data obtained by processing the platemaking data ~~, and image data obtained by reading the reference paper~~.

24. (Previously presented) The print quality measuring apparatus as defined in claim 18, further comprising:

gray control color determining means for determining, from the image data, a gray control color expressed in a substantially achromatic color and positions of the gray control color;

wherein said calculating means is arranged to create the control data for controlling the ink feeding rates of the printing machine, by using results of a comparative calculation of color

data in the positions of said gray control color of the image of the reference paper and color data in the positions of said gray control color of the printed image of the print, as well as results of the comparative calculation of the color data in the positions of the representative color of the image of the reference paper and the color data in the positions of the representative color of the printed image of the print, and

wherein only the results of the comparative calculation of the color data in the positions of said gray control color of the image of the reference paper and the color data in the positions of said gray control color of the printed image of the print are used when the representative color is devoid of one of said three color components.

25. (Cancelled)

26. (Previously Presented) The print quality measuring apparatus as defined in claim 24, wherein the control data for controlling the ink feeding rates of the printing machine is created by selectively using the results of the comparative calculation of the color data in the positions of the representative color of the image of the reference paper and the color data in the positions of the representative color of the printed image of the print, and the results of the comparative calculation of the color data in the positions of said gray control color of the image of the reference paper and the color data in the positions of said gray control color of the printed image of the print, or by using a compromise in an appropriate ratio of the results of the two comparative calculations.

27. (Currently Amended) A print quality measuring apparatus for comparing an image obtained by reading an image of a print printed by using one of platemaking data and image data with said platemaking data or said image data, to create control data for controlling ink feeding rates of a printing machine, said apparatus comprising:

reading means for reading the image of the print;

representative color determining means for determining a representative color characterizing the image of the print, and positions of the representative color, based on one of said platemaking data used at platemaking time and said image data created from the platemaking data; and

calculating means for carrying out a comparative calculation of color data in the positions of the representative color of the image of the print and the representative color, to create the control data for controlling the ink feeding rates of the printing machine,

wherein the representative color and the positions thereof are determined for respective rectangular sections on a printing paper corresponding to ink keys in each ink well of the printing machine,

wherein each of said platemaking data used at platemaking time and said image data created from the platemaking data has three color components, said representative color determining means being arranged to classify pixels in each of said sections corresponding to ink keys, and determine the representative color and a position thereof from pixels included in a predetermined class interval,

wherein said representative color determining means is arranged to create a histogram with tones of each of the three color components of each pixel in each of said sections, and select the representative color and the position thereof from pixels included in a class interval of

maximum frequency in said histogram, and

wherein the position of the representative color selected is a position having a maximum area formed by the pixels included in said class interval.

28-31. (Cancelled)

32. (Previously presented) The print quality measuring apparatus of claim 27, further comprising:

gray control color determining means for determining a gray control color expressed in a substantially achromatic color and positions of the gray control color, based on one of said platemaking data used at platemaking time and said image data created from the platemaking data;

wherein said calculating means is arranged to create the control data for controlling the ink feeding rates of the printing machine, by using results of a comparative calculation of color data in the positions of said gray control color of image data obtained by reading the image of the print and said gray control color, as well as results of the comparative calculation of the color data in the positions of the representative color of the image of the print and the representative color, and

wherein only the results of the comparative calculation of the color data in the positions of said gray control color of the image data obtained by reading the image of the print and said gray control color are used when the representative color is devoid of one of said three color components.

33. (Cancelled)

34. (Previously Presented) The print quality measuring apparatus as defined in claim 32, wherein the control data for controlling the ink feeding rates of the printing machine is created by selectively using the results of the comparative calculation of the color data in the positions of the representative color of the image data obtained by reading the image of the print and the representative color, and the results of the comparative calculation of the color data in the positions of said gray control color of the image data obtained by reading the image of the print and said gray control color, or by using a compromise in an appropriate ratio of the results of the two comparative calculations.